by him as an Australian occurrence of *Varanus prasinus* (Schlegel, 1839), a species otherwise known only from New Guinea and associated islands. Between 1980 and 1992 this name was used in nine publications; they included all but one (Cogger, 1992, who used *V. teriae*) of the general reference works to the Australian herpetofauna which mentioned the species. In 1985 Wells & Wellington (p. 21) proposed the specific name *keithhornei*, basing it on one of the specimens described by Czechura; they placed the species in the genus *Odatria* Gray, 1838. Within two years an application was published (BZN **44**: 116–121, June 1987) seeking the suppression of three entire works by Wells & Wellington, including that in which *O. keithhornei* was published. After publication of many comments (as mentioned in the application) this case was only resolved in December 1991, when the Commission published (BZN **48**: 337–338) its refusal to vote on the issue. In 1991 Sprackland described *Varanus teriae*, without mentioning the work by Wells & Wellington (of which he was apparently unaware until 1995: para. 4 of the application); the holotype of *V. teriae* was the same Czechura specimen mentioned for *O. keithhornei*.

3. In their application for the suppression of *O. keithhornei* Sprackland et al. did not note any usage of the name *Odatria* (or *Varanus*) *keithhornei* between 1991 and 1997. Such uses have been the formal synonymy of *V. teriae* and *O. keithhornei* by Covacevich & Couper (1994) and the subsequent use of the combination *Varanus keithhornei* by Irwin (1996), Kirschner, Müller & Seufer (1996) and Irwin & Irwin (1997).

4. Despite the use of three names for the Australian lizard since 1980 there is no prospect of any taxonomic confusion. The species is confined to a small remote area of rainforest in northern Australia and is little known. Apart from conservation aspects, the species is of significance mostly to herpetological taxonomists and varanid enthusiasts.

5. Sprackland et al. refer in their application to the difficulty experienced in obtaining copies of Wells & Wellington (1985), and imply that it was poorly known. However, they cite several publications that referred (before the publication of *V. teriae* in 1991) to the work, negating the suggestion that it was readily overlooked. However obscure the Wells & Wellington paper may be, it contains validly published names. Within Australia, the country to which it is mostly relevant, it was widely distributed, either in the original form or as photocopies, and several institutional libraries have copies. Sprackland's difficulty in obtaining a copy is irrelevant to the argument for suppressing the name *O. keithhornei*.

6. In summary, the specific names *keithhornei* and *teriae* are both available and are objective synonyms. Their history is short, and I believe that the Principle of Priority should be followed in this case.

Comments on the proposed conservation of the specific name of *Cnemidophorus neomexicanus* Lowe & Zweifel, 1952 (Reptilia, Squamata)

(Case 3049; see BZN **54**: 167–171)

(1) Charles J. Cole

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I fully support the proposals of Prof Smith and his coauthors for suppression of the name *Cnemidophorus perplexus* Baird & Girard, 1852 and conservation of the name *Cnemidophorus neomexicanus* Lowe & Zweifel, 1952. They have correctly and properly pointed out the many problems associated with the name *C. perplexus* (inconsistent and ambiguous usage; virtual abandonment in the last 30 years; problematical lectotype; problematical type series involving two taxa; uncertain type locality). They have also indicated well why *C. neomexicanus* should be conserved (consistent, unambiguous usage, particularly throughout the last 30 years) rather than be threatened by *C. perplexus*.

I quibble with only one minor point as stated by Smith et al. This does not change the conclusions to be reached, but further illustrates the complexities of this case and the need for this judgment, for otherwise specialists may suggest switching these names back and forth in a confusing fashion for many years.

My quibble is with the statement of Smith et al. that Taylor & Walker (1996) showed 'conclusively' that USNM 3060 (the supposed lectotype of *C. perplexus*) is not a hybrid (para. 5 of the application). Taylor & Walker presented strong new evidence consistent with this conclusion, based on morphology, but the most conclusive evidence would be genetic data, and given the history and state of preservation of the lectotype, no experimental methods exist for obtaining such conclusive evidence from this specimen today.

The name *C. neomexicanus* is applied to a taxon of hybrid origin that consists of several clones of unisexual whiptail lizards which reproduce parthenogenetically. The clones originated through hybridization among two previously existing bisexual taxa: *Cnemidophorus tigris marmoratus* ♀ x *C. inornatus* ♂. The genetic evidence for this is overwhelming (based on karyotypes, protein electrophoresis of about three dozen nuclear gene products, and mitochondrial DNA analyses), provided in some of the references presented by Smith et al. and particularly in the list of additional references presented below.

The nomenclatural problems can be resolved by supporting the proposals of Smith et al.

Additional references

Brown, W.M. & Wright, J.W. 1979. Mitochondrial DNA analyses and the origin and relative age of parthenogenetic lizards (genus *Cnemidophorus*). *Science*, **203**: 1247–1249.

Cole, C.J., Dessauer, H.C. & Barrowclough, G.F. 1988. Hybrid origin of a unisexual species of whiptail lizard, *Cnemidophorus neomexicanus*, in western North America: new evidence and a review. *American Museum Novitates*, **2905**: 1–38.

Densmore, L.D., III, Wright, J.W. & Brown, W.M. 1989. Mitochondrial-DNA analyses and the origin and relative age of parthenogenetic lizards (genus *Cnemidophorus*). II. *C. neomexicanus* and the *C. tesselatus* complex. *Evolution*, **43**: 943–957.

Dessauer, H.C. & Cole, C.J. 1986. Clonal inheritance in parthenogenetic whiptail lizards: biochemical evidence. *Journal of Heredity*, **77**: 8–12.

Dessauer, H.C. & Cole, C.J. 1989. Diversity between and within nominal forms of unisexual teiid lizards. *In*: Dawley, R.M. & Bogart, J.P. (Eds.), 'Evolution and ecology of unisexual vertebrates'. *New York State Museum Bulletin*, **466**: 49–71.

Dessauer, H.C., Reeder, T.W., Cole, C.J. & Knight, A. 1996. Rapid screening of DNA diversity using dot-blot technology and allele-specific oligonucleotides: maternity of hybrids and unisexual clones of hybrid origin (lizards, *Cnemidophorus*). *Molecular Phylogenetics and Evolution*, **6**: 366–372.

Parker, E.D., Jr. & Selander, R.K. 1984. Low clonal diversity in the parthenogenetic lizard *Cnemidophorus neomexicanus* (Sauria: Teiidae). *Herpetologica*, **40**: 245–252.

(2) Philip A. Medica

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I wish to express my support for this application and endorse the acceptance of the specific name of *Cnemidophorus neomexicanus* Lowe & Zweifel, 1952.

Having conducted research in the field of herpetology for the past 35 years in the southwestern United States I am familiar with the nomenclatural problems and the general acceptance of *neomexicanus* by professional herpetologists. During the mid-1960's my research focused on a study of four sympatric species of whiptail lizards in the southern Rio Grande Valley of New Mexico. The species were *Cnemidophorus neomexicanus*, *C. inornatus*, *C. exsangus* and *C. tigris* and the work was subsequently published (Medica, 1967).

Since the mid-1960's I have accepted the usage of the name *neomexicanus*, rather than *perplexus*, for the species of *Cnemidophorus* in question. Likewise, virtually all of the texts and field guides referring to this taxon now use *neomexicanus*. Therefore, I wholeheartedly support Prof Hobart Smith and his colleagues and request that *neomexicanus* be approved and *perplexus* be abandoned.

Additional reference

Medica, P.A. 1967. Food habits, habitat preference, reproduction, and diurnal activity in four sympatric species of whiptail lizards (*Cnemidophorus*) in south Central New Mexico. *Bulletin of the Southern California Academy of Sciences*, **66**(4): 251–276.

(3) Harold A. Dundee

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I wish to support Case 3049. It seems to me to be a very meritorious proposal.

A reader might well conclude that, with 11 authors who are all specialists in the enigma of parthenogenetic species of *Cnemidophorus*, the application clearly carries the full weight of specialist opinion. I would like to have seen John Wright's and C.W. Lowe's names also included because of their knowledge of *Cnemidophorus*, and because of Wright's (1969) proposal for suppression of the name *perplexus* (not submitted to the Commission; para. 5 of the application) after his (1967) paper with Lowe concluded that specimen USNM 3060, taken to be the lectotype, was a hybrid.

The authors of the application have certainly presented sufficient evidence of the desirability of conservation of the name *neomexicanus*, particularly the confusing history of *perplexus* prior to the consistent use of *neomexicanus* during the past 30 years or more. I therefore recommend that the Commissioners recognise the significance of specialist authority and that the name *neomexicanus* be conserved.

(4) Robert G. Webb

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This note is written in support of the application by Smith et al. to conserve the specific name of *Cnemidophorus neomexicanus* Lowe & Zweifel, 1952 as the valid name for the species of whiptail lizard, and to reject the name *C. perplexus* Baird & Girard, 1852. My herpetological colleague, Dr Carl S. Lieb, who is interested in the taxonomy of lizards in the southwestern United States, is also in agreement with the proposal.

It would be helpful for the former syntypes of *C. perplexus*, listed in para. 3 of the application, to be clearly documented as paralectotypes (i.e. lacking any name-bearing function) and representing a different species, *C. inornatus* Baird, 1858: USNM 30885 (Gambel specimen collected with lectotype), USNM 3050 and USNM 248691 (Churchill-Rio Grande), and USNM 3020 (lost, species unknown, Graham & Clark-Rio San Pedro [= Devils River, Val Verde County, Texas]).

(5) Wilmer W. Tanner

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When I was completing a study on the lizards of the Mexican State of Chihuahua I was confronted with the dilemma of the scientific name *Cnemidophorus perplexus* Baird & Girard, 1852 and concluded then that the most logical scientific name for the species was *C. neomexicanus* Lowe & Zweifel, 1952.

There is ample justification for the suppression of *perplexus* and confirmation of *neomexicanus* as the valid name for the taxon in question.

(6) David B. Wake

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I write to support the argument of Prof Hobart Smith and 10 coauthors that the specific name of *Cnemidophorus perplexus* Baird & Girard, 1852 be suppressed in favor of the name *C. neomexicanus* Lowe & Zweifel, 1952.

The name '*perplexus*' is apt, for the status of this name has been in question for many years and it now seems certain, as these authors agree, that it cannot now or in the future be resolved.

(7) Beth E. Leuck

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I am writing in support of the requested suppression of the specific name of *Cnemidophorus perplexus* Baird & Girard, 1852. I have researched and published on